1. (currently amended) An electric power switch, comprising:

an impedance;

a power contactor comprising a ~~linearly moving contactor having a~~ fixed contact and a moving contact~~, and~~ operable for closing an electric power circuit on a closing stroke and opening the electric circuit on an opening stroke;

an impedance contactor operable for entering the impedance into the circuit on the closing stroke and removing the impedance from the circuit on the opening stroke;

the impedance contactor comprising ~~a linearly moving butt contactor having a~~ an annular retracting contact ~~positioned adjacent to~~ surrounding the fixed contact of the power contactor and ~~a~~ an annular traveling contact ~~that moves~~ surrounding and moving with the moving contact of the power contactor; and

a timing device comprising a pneumatic chamber within the retracting contact vented by a restrictive orifice operable for causing the impedance contactor to close before the power contactor on the closing stroke, and to cause the impedance contactor to open before the power contactor on the opening stroke~~; and~~

~~a container filled with dielectric gas housing the power contactor and the impedance contactor~~.

2. (original) The electric power switch of claim 1, wherein the container comprises an insulator extending between first and second ends a sufficient distance to prevent arcing from occurring between a first electric power terminal located at the first end and a second electric power terminal located at the second end when a rated voltage for the switch is applied across the power terminals.

3. (original) The electric power switch of claim 1, wherein the container comprises a grounded conductive tank.

4. (currently amended) The electric power switch of claim 2, wherein the impedance is enclosed ~~housed~~ within a conductive cap comprising the first electric power terminal located at the first end of the insulator.

5. (currently amended) The electric power switch of claim 2, wherein the ~~charging~~ impedance is electrically connected to the contactors within the insulator ~~with internal posts~~.

6. (original) The electric power switch of claim 5, further comprising a capacitor introduced into the electric power circuit during the closing stroke and disconnected from the electric power circuit during the opening stroke.

7. (original) The electric power switch of claim 6, further comprising an accelerator driving the power contactor and the impedance contactor at sufficient speed to avoid a restrike during the opening stroke when the capacitor is removed from the electric circuit.

8. (original) The electric power switch of claim 1, wherein:

the retracting contact of the impedance contactor comprises a conductive ring positioned around the fixed contact of the power contactor; and

the traveling contact of the impedance contactor comprises a conductive ring positioned around the moving contact of the power contactor.

9. (currently amended) The electric power switch of claim 1, further comprising a container filled with dielectric gas housing the power contactor and the impedance contactor. ~~The electric power switch of claim 8, wherein the timing device controls the movement of the retracting contact during the opening stroke.~~

10. (currently amended) The electric power switch of claim 1 ~~9~~, wherein the timing device ~~comprises a puffer mechanism that~~ resists movement of the retracting contact between the retracted position and the extended position through pneumatic compression on the opening stroke.

11. (currently amended) The electric power switch of claim 4, wherein a first end of the impedance is in electrical contact with a first end of the cap, further comprising:

a base plate located within the cap supporting a second end of the impedance;

at least one insulating spacer located between the base plate and a second end of the cap;

at least one post extending from the base plate and through a hole in the second end of the cap, the post supporting the retracting contact adjacent to the second end of the cap;

wherein the post carries an electric current between the retracting contact and the impedance during operation of the switch.

~~The electric power switch of claim 10, wherein the puffer mechanism comprises a chamber integral with the retracting contact and a restrictive orifice venting the chamber.~~

12. (currently amended) The electric power switch of claim 1 ~~11~~, further comprising a flow control device affecting the size of the restrictive orifice and thereby adjusting the timing of the movement of the retracting contactor during the opening stroke.

13. (currently amended) The electric power switch of claim 9 ~~12~~, further comprising a nozzle configured to direct a stream of the dielectric gas into a contactor gap occurring across the power contactor during the closing stroke and during the opening stroke.

14. (currently amended) An electric power switch, comprising:

an impedance;

a power contactor including a fixed contact and a moving contact operable for closing an electric power circuit on a closing stroke and opening the circuit on an opening stroke;

an impedance contactor operable for entering the impedance into the circuit on the closing stroke and removing the impedance from the circuit on the opening stroke;

the impedance contactor including ~~a~~ an annular retracting contact ~~positioned around~~ surrounding the fixed contact of the power contactor and ~~a~~ an annular traveling

contact ~~that moves~~ surrounding and moving with the moving contact of the power contactor;

the retracting contact movable between an extended position and a retracted position, and configured to retract from the extended position to the retracted position under force applied by the traveling contact during the closing stroke;

a container filled with dielectric gas housing the power contactor;

a nozzle configured to direct a stream of the dielectric gas into a contactor gap occurring across the fixed contact and the moving contact of the power contactor during the closing stroke and during the opening stroke;

an accelerator driving the power contactor and the impedance contactor at sufficient speed to avoid a restrike during the opening stroke; and

a timing device comprising a pneumatic chamber within the retracting contact vented by a restrictive orifice operable for controlling the movement of the retracting contact to cause the impedance contactor to close before the power contactor on the closing stroke, and to cause the impedance contactor to open before the power contactor on the opening stroke.

15. (original) The electric power switch of claim 14, wherein the power contactor comprises a penetrating contactor and the impedance contactor comprises a butt contactor.

16. (original) The electric power switch of claim 14, wherein the impedance contactor is located inside the dielectric gas container.

17. (original) The electric power switch of claim 16, further comprising a capacitor introduced into the electric power circuit during the closing stroke and disconnected from the electric power circuit during the opening stroke.

18. (original) The electric power switch of claim 17, wherein the container comprises an insulator extending between first and second ends a sufficient distance to prevent arcing from occurring between a first electric power terminal located at the first end and a second electric power terminal located at the second end when a rated voltage for the switch is applied across the power terminals.

.19. (original) The electric power switch of claim 17, wherein the container comprises a grounded conductive tank.

20. (currently amended) The electric power switch of claim 18, wherein the impedance is enclosed ~~housed~~ within a conductive cap comprising the first electric power terminal located at the first end of the insulator.

21. (currently amended) The electric power switch of claim 20, wherein a first end of the ~~charging~~ impedance is ~~electrically connected to the contactors within the insulator~~ in electrical contact with ~~internal posts.~~ a first end of the cap, further comprising:

a base plate located within the cap supporting a second end of the impedance;

at least one insulating spacer located between the base plate and a second end of the cap;

at least one post extending from the base plate and through a hole in the second end of the cap, the post supporting the retracting contact adjacent to the second end of the cap;

wherein the post carries an electric current between the retracting contact and the impedance during operation of the switch.

22. (original) The electric power switch of claim 21, wherein:

the traveling contact of the impedance contactor comprises a conductive ring positioned around the moving contact of the power contactor; and

the retracting contact of the impedance contactor comprises a conductive ring positioned around the fixed contact of the power contactor.

23. (original) The electric power switch of claim 22, further comprising a spring biasing the retracting contact toward the extended position.

24. (currently amended) The electric power switch of claim 14, wherein the timing device resists movement of the retracting contact between the retracted position and the extended position through pneumatic compression on the opening stroke. ~~The electric power switch of claim 23, wherein the puffer mechanism comprises a chamber integral with the retracting contact and a restrictive orifice venting the chamber.~~

25. (original) The electric power switch of claim 24, further comprising a flow control device affecting the size of the restrictive orifice and thereby adjusting the timing of the movement of the retracting contactor.

26. (currently amended) An electric power switch, comprising:

a container filled with dielectric gas comprising an insulator extending between first and second ends a sufficient distance to prevent arcing from occurring between a first electric power terminal located at the first end and a second electric power terminal located at the second end when a rated voltage for the switch is applied across the power terminals;

an impedance enclosed ~~housed~~ within a conductive cap comprising the first electric power terminal located at the first end of the insulator wherein a first end of the impedance is in electrical contact with a first end of the cap;

a power contactor comprising a linearly moving penetrating contactor housed within the insulator, having a fixed contact and a moving contact, and operable for closing an electric power circuit on a closing stroke and opening the electric circuit on an opening stroke;

an impedance contactor housed within the insulator and operable for entering the impedance into the circuit on the closing stroke and removing the impedance from the circuit on the opening stroke;

the impedance contactor comprising ~~a linearly moving butt contactor having a~~ an annular retracting contact ~~positioned adjacent to~~ surrounding the fixed contact of the power contactor and ~~a~~ an annular traveling contact ~~that moves~~ surrounding and moving with the moving contact of the power contactor; ~~and~~

a base plate located within the cap supporting a second end of the impedance, at least one insulating spacer located between the base plate and a second end of the cap, at least one post extending from the base plate and through a hole in the second end of the cap, the post supporting the retracting contact adjacent to the second end of the cap, and wherein the post carries an electric current between the retracting contact and the impedance during operation of the switch; and

a timing device operable for causing the impedance contactor to close before the power contactor on the closing stroke, and to cause the impedance contactor to open before the power contactor on the opening stroke.

27. (original) The electric power switch of claim 26, wherein:

the retracting contact of the impedance contactor comprises a conductive ring positioned around the fixed contact of the power contactor; and

the traveling contact of the impedance contactor comprises a conductive ring positioned around the moving contact of the power contactor.

28. (currently amended) The electric power switch of claim 26, wherein the timing device comprises a pneumatic chamber within the retracting contact vented by a restrictive orifice. ~~The electric power switch of claim 26, wherein the timing device comprises a puffer mechanism that resists movement of the retracting contact between the retracted position and the extended position through pneumatic compression on the opening stroke.~~

29. (currently amended) The electric power switch of claim 28, further comprising a flow control device affecting the size of ~~a~~ the restrictive orifice ~~of the puffer mechanism~~ venting the pneumatic chamber and thereby adjusting the timing of the movement of the retracting contactor.

30. (original) The electric power switch of claim 26, further comprising a capacitor introduced into the electric power circuit during the closing stroke and disconnected from the electric power circuit during the opening stroke.

31. (original) The electric power switch of claim 30, further comprising an accelerator driving the power contactor and the impedance contactor at sufficient speed to avoid a restrike during the opening stroke when the capacitor is removed from the electric circuit.

32. (original) The electric power switch of claim 31, further comprising a nozzle configured to direct a stream of the dielectric gas into a contactor gap occurring across the fixed contact and the moving contact of the power contactor during the closing stroke and during the opening stroke.

33. (currently amended) The electric power switch of claim 28, wherein the timing device resists movement of the retracting contact between the retracted position and the extended position through pneumatic compression on the opening stroke. ~~The electric power switch of claim 32, wherein the charging impedance is electrically connected to the contactors within the insulator with internal posts.~~

Respectfully submitted,

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